

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A document search method for finding a document relevant to a search condition from object documents as search objects, comprising the steps of:

acquiring a seed text which is inputted as the search condition;
partitioning the object document into a plurality of blocks;
calculating similarity of each block of the object document to the seed text;
~~comparing the calculated similarity with a preset threshold value and thereby~~
~~judging whether or not each block is relevant to the seed text the calculated similarity~~
satisfies a predetermined ~~condition;~~ and condition;

calculating, as an inclusion degree, ~~of the object document including the~~
~~blocks regarding the seed text based on the result of the judgment~~ a ratio of blocks
that are judged as satisfying said condition to the whole of the object
~~document~~ document; and

outputting the inclusion degree.

2. (Currently amended) The document search method according to claim 1, ~~further comprising the steps of:~~

~~calculating similarity of the object document to the seed text; and~~

~~displaying the calculated similarity of the object document to the seed text and the calculated inclusion degree of the object document regarding the seed text~~wherein said step of outputting includes outputting the inclusion degree and the similarity with the similarity and the inclusion degree being associated with each other.

3. (Currently amended) A document search device for finding a relevant document from object documents as search objects, comprising:

a seed text acquisition module which acquires a seed text as a search condition;

a partitioning module which partitions the object document into a plurality of blocks;

a similarity calculation module which calculates similarity of each block of the object document to the seed text;

an inclusion degree calculation module which ~~compares~~ judges whether the calculated similarity of each block with a preset threshold value, thereby judges whether or not each block is relevant to the seed text, and calculates an inclusion degree of the object document including the blocks regarding the seed text based on the result of the judgment satisfies a first predetermined condition and calculates, as an inclusion degree, a ratio of blocks that are judged as satisfying the first predetermined condition to the whole of the object document~~document~~document; and

an output module which outputs the inclusion degree.

4. (Currently amended) The document search device according to claim 3, further comprising:

a full-text search condition acquisition module which acquires a full-text search condition to be used for a full-text search of the object documents;

a full-text search condition analysis module which analyzes the acquired full-text search condition; and

a full-text search condition relevancy calculation module which, ~~executes a full-text search to each block~~ based on the analyzed full-text search condition, calculates, as a full-text search condition relevancy, a ratio of a number of relevant min terms satisfied by characteristic strings of said each block to a number of total min terms included in the full-text search condition, wherein: ~~and thereby calculates relevancy of each block to the full-text search condition, wherein:~~

~~the inclusion degree calculation module calculates the inclusion degree of the object document regarding the seed text by use of the full-text search condition relevancy of each block of the object document calculated by the full-text search condition relevancy calculation module and the similarity of each block of the object document to the seed text calculated by the similarity calculation module judges whether or not the calculated similarity satisfies the first predetermined condition and whether or not the calculated full-text search condition relevancy satisfies a second predetermined condition, and calculates, as the inclusion degree, a ratio of blocks that are judged to satisfy the first and second predetermined conditions to the whole of the object document.~~

5. (Currently amended) The document search device according to claim 3, wherein said output module outputs the inclusion degree and the similarity with the similarity and the inclusion degree being associated with each other~~further comprising a display module which places the object documents in order of the inclusion degree regarding the seed text or in order of similarity to the seed text and displays the order of the object documents.~~

6. (Currently amended) A computer-readable record medium storing a program for instructing a computer to execute a relevant document search method for finding a relevant document from object documents as search objects, wherein the relevant document search method comprises the steps of:

acquiring a seed text as a search condition for searching the object documents;

partitioning the object document into a plurality of blocks;

calculating similarity of each block of the object document to the seed text;

~~comparing the calculated similarity with a preset threshold value;~~

~~judging whether or not each block is relevant to the seed text based on the comparison and thereby counting the number of blocks relevant to the seed text the calculated similarity satisfies a predetermined condition; and~~condition;

~~calculating, as an inclusion degree, of the object document regarding the seed text based on the counted number of the relevant blocks a ratio of blocks that are judged to satisfy said condition to the whole of the object text~~text; and

outputting the inclusion degree.

7. (Currently amended) A document relevancy judgment method for judging relevancy of a previously stored object document to a seed text as a search condition, comprising the steps of:

- partitioning the object document into a plurality of blocks;
- calculating similarity of each block of the object document to the seed text;
- ~~comparing the calculated similarity with a preset threshold value and thereby~~ judging whether or not ~~each block is relevant to the seed text~~ the calculated similarity satisfies a first predetermined condition;
- ~~counting the number of blocks relevant to the seed text based on the~~ judgment; and
- calculating, as an inclusion degree, ~~of the object document including the blocks regarding the seed text based on the counted number of the relevant blocks a~~ ratio of blocks that are judged to satisfy said first predetermined condition to the whole of the object document document; and
- outputting the inclusion degree.

8. (Currently amended) The document relevancy judgment method according to claim 7, wherein said step of outputting includes outputting the inclusion degree and the similarity with the similarity and the inclusion degree being associated with each other ~~further comprising the steps of:~~

- ~~calculating similarity of the object document to the seed text;~~
- ~~displaying at least one of the calculated similarity of the object document to the seed text and the calculated inclusion degree of the object document regarding the seed text.~~

9. (Currently amended) The document relevancy judgment method according to claim 7, further comprising the steps of:

acquiring a full-text search condition for a full-text search of the object document;

calculating, as a full text search condition relevancy, a ratio of a number of relevant min terms satisfied by characteristic strings of said each block to a number of total min terms included in the full-text search condition of each block of the object document to the acquired full-text search condition; and

judging whether or not each block of the object document is relevant to the search conditions by use of the calculated relevancy of the block to the full-text search condition and the calculated similarity of the block to the seed-text the calculated similarity satisfies the first predetermined condition and whether or not the calculated full-text search condition relevancy satisfies a second predetermined condition, and calculates, as the inclusion degree, a ratio of blocks that are judged to satisfy the first and second predetermined conditions to the whole of the object document.

10. (Currently amended) A relevant document search method for finding a document from object documents as search objects, comprising the steps of:

acquiring a full-text search condition which is inputted as a search condition;

partitioning the object document into a plurality of blocks;

calculating similarity of each block of the object document to the full-text search condition;

~~comparing~~ judging whether or not the calculated similarity ~~with a preset~~
~~threshold value and thereby judging whether or not each block is relevant to the full-~~
~~text search condition satisfies a predetermined condition; and~~condition;

calculating, as an inclusion degree, ~~of the object document including the~~
~~blocks regarding the full-text search condition based on the result of the judgment a~~
ratio of blocks that are judged as satisfying said condition to the whole of the object
~~document~~document; and

outputting the inclusion degree.

11. (Currently amended) The relevant document search method according
to claim 10, wherein said step of outputting includes outputting the inclusion degree
and the similarity with the similarity and the inclusion degree being associated with
each other~~further comprising the steps of:~~

~~calculating similarity of the object document to the full-text search condition;~~
~~and~~

~~displaying the calculated similarity of the object document to the full-text~~
~~search condition and the calculated inclusion degree of the object document~~
~~regarding the full-text search condition.~~

12. (Original) The document search method according to claim 1, further
comprising the steps of:

extracting character strings from the acquired seed text; and

extracting character strings from each block of the object document, wherein:

the similarity of each block of the object document to the seed text is calculated by comparing the character strings extracted from each block with the character strings extracted from the seed text.

13. (Original) The document search method according to claim 12, further comprising the steps of:

regarding each block as a relevant block to the seed text if the calculated similarity of the block is higher than a preset value;
counting the number of blocks judged as the relevant blocks; and
storing the counted number of relevant blocks.

14. (Currently amended) The document search method according to claim 13, wherein the total number of blocks included in the object document is calculated, and the inclusion degree of the object document regarding the seed text is calculated from the stored number of relevant blocks and the total number of blocks included in the object document a ratio of the calculated total number of blocks to the stored counted number of relevant blocks.

15. (Currently amended) The document search device according to claim 4, further comprising a characteristic string extraction module which extracts characteristic strings from the seed text, wherein:

the characteristic string extraction module extracts characteristic strings also from each block of the object document, and document.

the similarity calculation module calculates the similarity of each block by comparing the characteristic strings extracted from the block with the characteristic strings extracted from the seed text, and

the inclusion degree calculation module regards each block as a relevant block if the similarity of the block is higher than a preset value and the full-text search condition relevancy of the block is higher than a preset value, counts the number of the relevant blocks included in the object document, and calculates the inclusion degree of the object document by use of the counted number of relevant blocks and the total number of blocks included in the object document.

16. (Currently amended) A relevant document search device for finding a relevant document from object documents as previously registered search objects, comprising:

a partitioning module which partitions the object document into a plurality of blocks;

a characteristic string extraction module which extracts characteristic strings from each block of the object document;

a block characteristic string storage module which stores the extracted characteristic strings associating them with each block;

a seed text acquisition module which acquires a seed text as a search condition;

a similarity calculation module which calculates similarity of each block to the seed text ~~by comparing and judging and judges~~ whether or not the calculated similarity satisfies a predetermined condition ~~the characteristic strings of the block~~

~~stored in the block characteristic string storage module with characteristic strings extracted from the seed text by the characteristic string extraction module; and;~~

~~an inclusion degree calculation module which counts the number of blocks having the similarity higher than a preset value and calculates an inclusion degree of the object document regarding the seed text based on the counted number of blocks and the total number of blocks included in the object document calculates, as an inclusion degree, a ratio of blocks that are judged as satisfying the predetermined condition to the whole of the object document~~document; and
an output module which outputs the inclusion degree.

17. (Currently amended) The relevant document search device according to claim 16, wherein said output module outputs the inclusion degree and the similarity with the similarity and the inclusion degree being associated with each other~~further comprising an output module which outputs at least one of the similarity calculated by the similarity calculation module and the inclusion degree calculated by the inclusion degree calculation module.~~

18. (Currently amended) A program for letting a document search system execute a process for finding a document relevant to a search condition from object documents as search objects, wherein the process comprises the steps of:

acquiring a seed text as the search condition;
partitioning the object document into a plurality of blocks;
calculating similarity of each block of the object document to the acquired seed text;

judging whether or not the calculated similarity satisfies a first predetermined condition; and condition;

calculating, as an inclusion degree, ~~of the object document regarding the seed text by a ratio of blocks that are judged as satisfying said first predetermined condition to the whole of the object document judging whether or not the similarity of each block of the object document is higher than a preset value;~~ and outputting the inclusion degree.

19. (Currently amended) The program according to claim 18, wherein the process further comprises the steps of:

analyzing a full-text search condition to be used for a full-text search of the object documents; documents; and

~~executing a full-text search to each block based on the analyzed full-text search condition and thereby calculating relevancy of each block to the full-text search condition;~~ calculating, as a full-text search condition relevancy, a ratio of a number of relevant min terms satisfied by characteristic strings of said each block to a number of total min terms included in the full-text search condition, wherein:

the inclusion degree calculation step ~~calculates the inclusion degree of the object document regarding the seed text by use of the full-text search condition relevancy of each block of the object document calculated in the full-text search condition relevancy calculation step and the similarity of each block of the object document to the seed text calculated in the similarity calculation step~~ judges whether or not the calculated similarity satisfies the first predetermined condition and whether or not the calculated full-text search condition relevancy satisfies a second

predetermined condition, and calculates, as the inclusion degree, a ratio of blocks that are judged to satisfy the first and second predetermined conditions to the whole of the object document.

20. (Currently amended) The program according to ~~claim 19~~claim 18,
wherein said step of outputting includes outputting the inclusion degree and the
similarity with the similarity and the inclusion degree being associated with each
other~~wherein the process further comprises the steps of:~~
~~placing the object documents in order of the inclusion degree regarding the~~
~~seed text or in order of similarity to the seed text; and~~
~~displaying the order of the object documents.~~